

THE PORT AUTHORITY
OF NY & NJ



ORIGINAL SIGNED & SEALED BY
N.Y. P.E. (OR R.A.)

**Joseph R. Loring
& Associates, Inc.**
consulting engineers

One Pennsylvania Plaza
New York, New York 10045
Tel. (212) 363-7400, Fax (212) 363-7382

THE OFFICE OF
DAVID
ELIOT
LEBOVITZ
P.C.

LESLIE S. ROBERTSON
ASSOCIATES, R.L.P.
CONSULTING STRUCTURAL ENGINEERS
28 EAST 87TH STREET
NEW YORK, NY 10019
TEL. (212) 363-7400 FAX (212) 363-7382

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT
COPY OF ONE OF THE CONTRACT DRAWINGS
CONSTITUTING A PART OF CONTRACT NO. WTC-945-071
IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT
THE TIME THE SAID CONTRACT WAS EXECUTED BY
THE PARTIES.
DATE 11/16/98 *William A. Hulse*
DATE 4/10/98 *T. L. Loring*
EXAMINER OF DESIGN

12/12/97 MOORE F.O. TANK PIPES
11/17/97 ISSUED FOR BID

No. Date Revision Approved

Engineering Department

Design Divisions

**The
World
Trade
Center**

Title
**STANDBY POWER
5 WORLD TRADE CENTER**

MECHANICAL

**5 WTC PART PLAN
B2 LEVEL FUEL
OIL TANK ROOM**

This drawing subject to conditions in contract.
All inventions, ideas, designs and methods
herein are reserved to Port Authority and
may not be used without its written consent.

J.D. D.H.B.

Designed by Drawn by Check by

Date 11/17/97 Scale AS NOTED

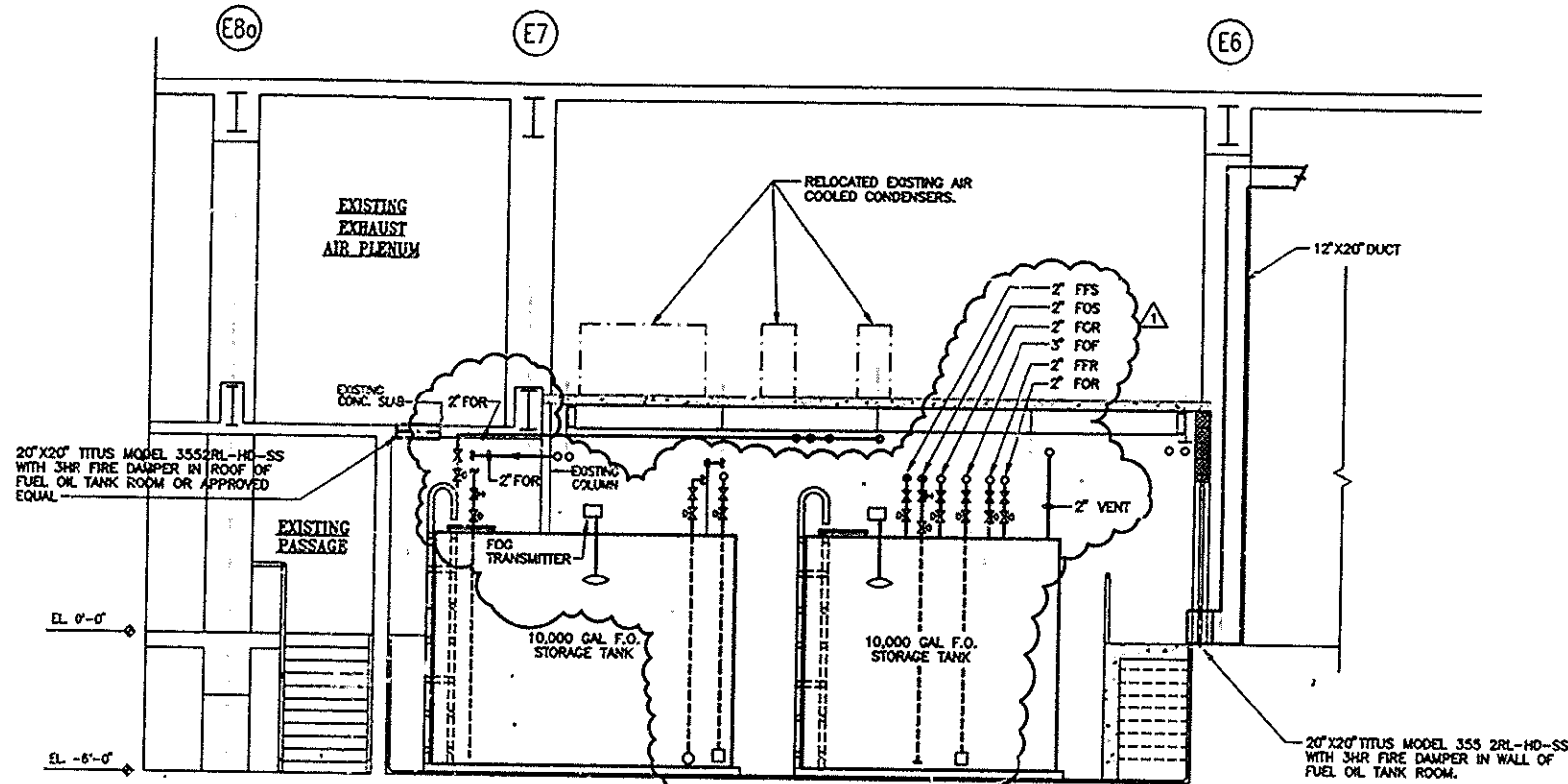
Contract Number Drawing Number

WTC-945-071 M-02

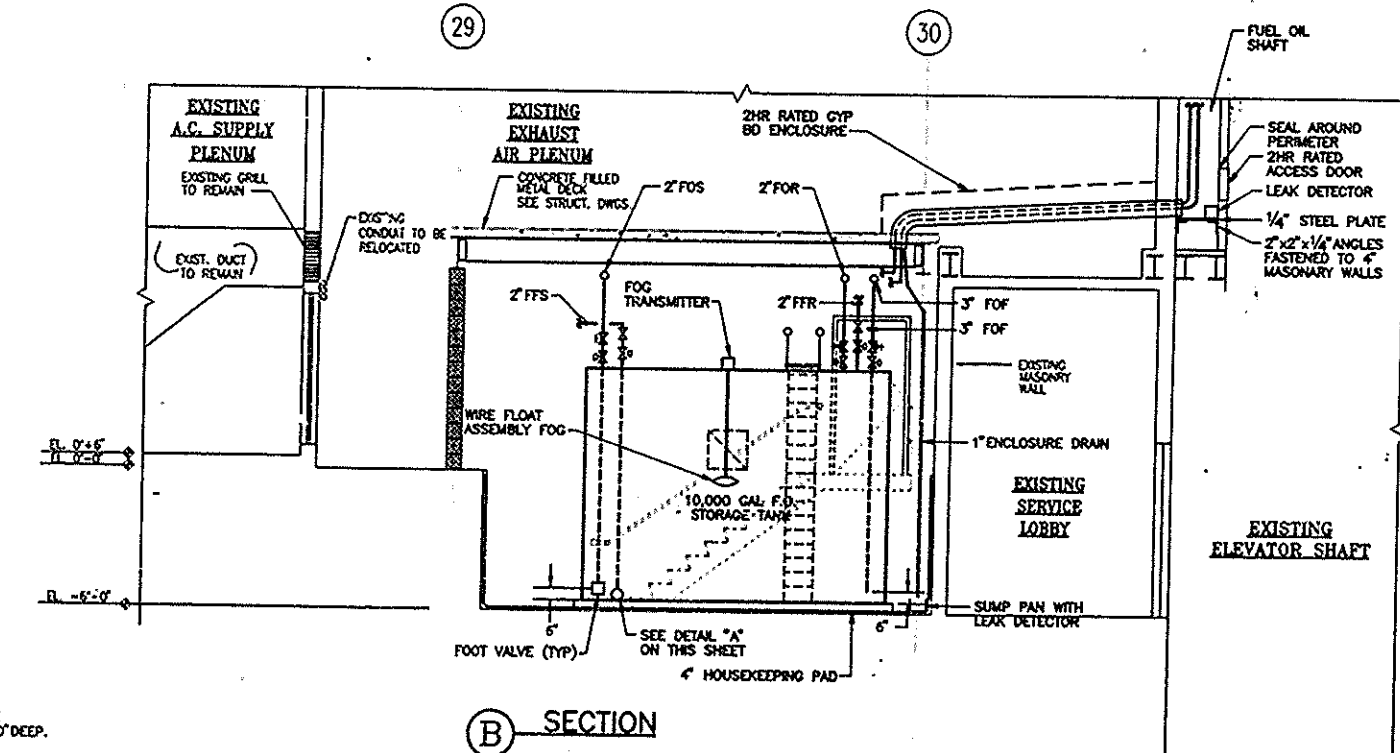
PUMP SCHEDULE									
BASIS OF DESIGN: PREFERRED UTILITIES									
PUMP NO.	LOCATION	GPM	TOTAL HEAD (FT.)	NPSH REQ'D (FT.)	OPERATING PRESS. (PSIG)	FLUID TEMP. (°F)	MOTOR DATA	RPM	PUMP TYPE
FP-1	B2 LEVEL TRANSFER SET	1800	175	200	70	5	460/3	1140	POSITIVE DISPLACEMENT
FP-2	B2 LEVEL TRANSFER SET	1800	175	200	70	5	460/3	1140	POSITIVE DISPLACEMENT
FP-3	B2 LEVEL FUEL MAINTENANCE SET	1200	—	200	70	1 1/2	460/3	1140	POSITIVE DISPLACEMENT
FP-4	B2 LEVEL FUEL MAINTENANCE SET	1200	—	200	70	1 1/3	—	1140	—
FP-5	B2 LEVEL FUEL MAINTENANCE SET	1200	—	200	70	1 1/3	—	1140	POSITIVE DISPLACEMENT

NOTES:

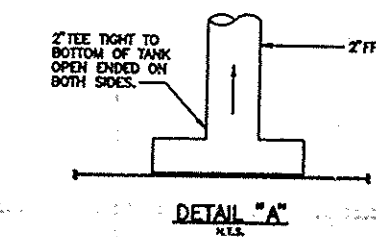
- ALL PIPING TO THE TANKS EXCEPT F.O. WILL BE PROVIDED WITH LINE SIZE GATE VALVES AND ELECTRIC CONTROL VALVES.
- 3" F.O. TO BE PIPED INSIDE THE TANKS DOWN TO 6" ABOVE THE BOTTOM WITH OPEN PIPE.
- 2" F.O. TO BE PIPED INSIDE THE TANKS SO THE BOTTOM OF THE FOOT VALVE IS 6" ABOVE BOTTOM OF TANK.
- 2" F.O. TO BE PIPED DOWN TO BOTTOM OF TANK WITH A TEE FITTING SEE DETAIL "A" THIS SHEET.
- ALL RETURN AND RELIEF PIPES TO BE OPEN ENDED AS THEY PENETRATE THE TANK ROOF.
- TANK GAUGES TO BE CENTERED WITHIN TANK AND CLEAR BY 2'-0" OF ANY BRACING FOR CLEARANCE OF WIRE FLOAT.



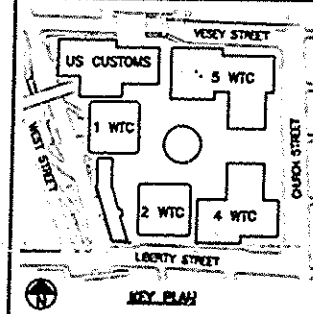
(A) SECTION



(B) SECTION



DETAIL "A"



1" = 4'

NOTE:
1. 10,000 GAL. FUEL OIL TANKS TO BE 12'-6" LONG x 11'-6" WIDE x 10'-0" DEEP.

5 WTC PART PLAN B2 LEVEL
FUEL OIL TANK ROOM

